

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Larry D. Barto, Steven C. Nettles, Yiwei Li  
Assignee: Advanced Micro Devices, Inc.  
Title: Starvation Avoidance Lot Start Agent (SALSA)  
Serial No.: Unknown Filing Date: Herewith  
Docket No.: M-7511 US Client Ref. No.: TT3418

San Jose, California  
April 3, 2001

BOX PATENT APPLICATION  
COMMISSIONER FOR PATENTS  
Washington, D. C. 20231

**PRELIMINARY AMENDMENT AND REMARKS**

Dear Sir:

The following Amendments and Remarks are submitted for entry into the application filed herewith.

AMENDMENTS

*In the Specification*

Page 34, Table 2.1, Row 11, please revise the information in the specification as follows; a mark-up version of the amendment is shown in Appendix A:

TABLE 2.1

Assume $B = 6$ lots per batch and $WafersPerLot = 25$ wafers per lot.
In operation (1), $WaferStarts = B * (WafersPerLot) = 6 * 25 = 150$ wafers
In operation (2), assume remaining wafers starts ( $RW_T$ ) > 150 wafers, thus $WaferStarts$ is unchanged
In operation (3), assume previous $Starts = 0$ , thus $Starts = 0 + WaferStarts = 150$
In operation (4), assume product $P_i$ is chosen to start all 150 wafers
In operation (5), calculate consumption time of 150 wafers of product $P_i$
In Figure 6, product $P_i$ has a processing time $D_{i,g} = 2$ minutes per wafer at the first "etcher" bottleneck occurrence at step 4.
When 150 wafers are released into the manufacturing line, they will immediately become part of bottleneck segment 1. The virtual WIP that will be added to segment 1 is derived by the formula on line 12 of page 22, substituting $WaferStarts$ as the additional WIP in segment 1: $V_{i,g} = (D_{i,g} / M) * WaferStarts$
Assume $M = 2$ machines.
Then consumption time for 150 $WaferStarts$ at the first bottleneck occurrence is: $Consumption\ Time = (2 / 2) * 150 = 150$ minutes
Thus operation (5) increases the delta VWIP ( $DV_i$ ) for this bottleneck by 150 minutes: $DV_i = DV_i + 150$

REMARKS

This preliminary amendment is being filed concurrently with the application so as to correct a minor typographical error. No new matter is being added. If there are any issues or questions regarding this preliminary amendment, please call the undersigned at (512) 794-3600.

EXPRESS MAIL LABEL NO:

EL708268826US

Respectfully submitted,



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## APPENDIX B

The Preliminary Amendment amends the Specification to read as follows:

TABLE 2.1

Assume $B = 6$ lots per batch and $WafersPerLot = 25$ wafers per lot.
In operation (1), $WaferStarts = B * (WafersPerLot) = 6 * 25 = 150$ wafers
In operation (2), assume remaining wafers starts ( $RW_T$ ) > 150 wafers, thus $WaferStarts$ is unchanged
In operation (3), assume previous $Starts = 0$ , thus $Starts = 0 + WaferStarts = 150$
In operation (4), assume product $P_i$ is chosen to start all 150 wafers
In operation (5), calculate consumption time of 150 wafers of product $P_i$
In Figure 6, product $P_i$ has a processing time $D_{i,g} = 2$ minutes per wafer at the first "etcher" bottleneck occurrence at step 4.
When 150 wafers are released into the manufacturing line, they will immediately become part of bottleneck segment 1.
The virtual WIP that will be added to segment 1 is derived by the formula on line 12 of page 22, substituting $WaferStarts$ as the additional WIP in segment 1: $V_{i,g} = (D_{i,g} / M) * WaferStarts$
Assume $M = 2$ machines.
Then consumption time for 150 $WaferStarts$ at the first bottleneck occurrence is: $Consumption\ Time = (2 / 2) * 150 = 150\ minutes$
Thus operation [(4)] (5) increases the delta VWIP ( $DV_i$ ) for this bottleneck by 150 minutes: $DV_i = DV_i + 150$